

AMENDMENTS

IN THE CLAIMS:

Please amend claims 1 and 22 as provided below:

1. (Currently amended) A circuit arrangement for transmitting and receiving radio signals, comprising:

an amplification device including an output terminal for transmitting signals, and a supply terminal; and

an antenna for transmitting and receiving signals, the antenna connected to the output of the amplification device;

wherein the output terminal of the amplification device is an input terminal for a signal received via the antenna, wherein the amplification device is configured to convert the signal received via the antenna at the output terminal thereof into a converted signal, and further configured to provide the converted signal at the supply terminal thereof.

2. (Original) The circuit arrangement of Claim 1, wherein the amplification device includes a supercritical power amplifier in a C-E mode of operation.

3. (Previously presented) The circuit arrangement of Claim 2, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

4. (Original) The circuit arrangement of Claim 2, wherein the converted signal is a modulated supply current.

5. (Previously presented) The circuit arrangement of Claim 4, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

6. (Previously presented) The circuit arrangement of Claim 2, wherein the converted signal is a modulated voltage drop on the supply terminal.

7. (Previously presented) The circuit arrangement of Claim 6, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

8. (Original) The circuit arrangement of Claim 1, wherein the converted signal is a modulated supply current.

9. (Previously presented) The circuit arrangement of Claim 8, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

10. (Previously presented) The circuit arrangement of Claim 1, wherein the converted signal is a modulated voltage drop on the supply terminal.

11. (Previously presented) The circuit arrangement of Claim 10, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

12. (Previously presented) The circuit arrangement of Claim 1, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

13. (Original) The circuit arrangement of Claim 1, wherein a transmission rate associated with symbols transmitted by the amplification device is different than a reception rate associated with symbols received by the amplification device.

14. (Original) The circuit arrangement of Claim 1, provided as a transceiver of FSK-modulated data.

15. (Original) The circuit arrangement of Claim 1, wherein the amplification device is for transmitting an outgoing signal via the antenna to an object whose reflection behavior changes over time, and wherein the amplification device is further for monitoring the converted signal during said transmission of the outgoing signal to detect a change in the object over time.

16. (Original) The circuit arrangement of Claim 1, wherein the amplification device is for transmitting an outgoing signal via the antenna into a spatially limited area, and wherein the amplification device is further for monitoring the converted signal during said transmission of the outgoing signal to detect a change within the area over time.

17. (Original) The circuit arrangement of Claim 1, operable for transmitting and receiving radio signals nonsimultaneously.

18. (Previously presented) A method for frequency conversion in an amplification device having a supply terminal for a supply current, a signal input terminal and a signal output terminal, comprising:

applying a first signal to the signal input terminal of the amplification device with nondiminishing amplitude;

applying a second signal to the signal output terminal of the amplification device;
and

converting the second signal at the signal output terminal into a converted signal onto the supply terminal, including operating the amplification device in a supercritical range.

19. (Original) The method of Claim 18, including monitoring the supply current over time to detect movement in a 3-dimensional area.

20. (Original) The method of Claim 18, including monitoring the supply current over time to detect a change in an object over time.

21. (Previously presented) The method of Claim 18, wherein converting the second signal into the supply current further comprises converting the second signal into a modulation of the supply current.

22. (Currently amended) A transceiver arrangement comprising:
an amplifier comprising an output terminal and a supply terminal configured to receive a supply voltage;
an antenna configured to transmit and receive signals, wherein the antenna is connected to the output terminal of the amplifier; and
a demodulator with an input terminal configured to demodulate a signal provided at the input terminal thereof, wherein the input terminal of the demodulator is coupled to the supply terminal of the amplifier, and wherein the amplifier is configured to convert a signal received at the antenna and provide at its output terminal [[to]] a converted signal, and provide the converted signal onto the supply signal at the supply terminal thereof.

23. (Previously presented) The transceiver arrangement of claim 22, further comprising a filter configured to suppress a DC-portion of the converted signal, wherein the filter is arranged between the input terminal of the demodulator and the supply terminal of the amplifier.